UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,571	08/22/2003	Hyun-Il Kwon	44846	8216

1609 7590 03/21/2008

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
1300 19TH STREET, N.W.
SUITE 600
WASHINGTON,, DC 20036

EXAMINER	
WONG, XAVIER S	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
03/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

Applicants argue for claim **1** that **Lee** et al do not teach "a code generator for generating a synchronization code used in the *determined* system mode in response to the system mode *select signal*." In paragraph *0053* and figure *4*, **Lee** et al disclose that a shared controller and (code) generator that can select either async (DS) or sync (MC) modes. **Lee** et al also mention in the same paragraph that the mobile station (e.g. UE) can intend to acquire sync timing in during operation in async system as the generator acquires sync timing code. In this case, **Lee** et al may be *read on* as the intended or determined mode is the sync mode and the mobile station selects the sync mode. The claim **1** limitation *broadly* states "the determined system mode in response to the system mode select signal" without specifically mentioning "sync → async" or "async → sync" two-way modes. Therefore, as long as one of the modes can switch to another mode, **Lee** et al may read on the ***claim language*** and limitation of claim **1**.

Applicants argue for claim **5** that **Lipponen** et al neither teach "a feedback value input to a first number of shift registers ... or ... to a second number of shift registers" nor "masking a mask value for generating the synchronization code used in the determined system mode, to shift register value according to the predetermined control." **Lipponen et al** disclose a linear feedback shift register (**which comprises register sets *272*, *274*, *276*, *278* and *280* in figure *2c* which reads on as having *at least a first and second number of shift registers***) in which its code is generated/inputted by mask registers based on a previous (1st) state (**which the examiner interprets as a *predetermined mode***) before shifting into a new (2nd) state (**which the examiner interprets as a *determined* mode**)

([*0021-22*] & [*0070-71*]; figs. *2C* & *3A-B*; *abstract*). The code generator, which controls the mask registers, is controlled by control(s) *262A* and *262B* based on an initial/predetermined state/mode as shown in figure *2B* ([*0052-54*]; claim *8*). Fig. *2C* shows that register 3 (*276*) has a feedback route through an XOR gate (*284*) (e.g. **masking a mask value**) and line *288* back to register *1* (*272*); and at the same time, the last register *5* (*280*) has a feedback route through the same XOR gate back to register *1*. Therefore, such *broadly reads on* as any state can be set as an initial state (besides zero) based on the position of the feedback route/tap. The linearity of the PN code refers to a characteristic that a code with the same period is generated irrespective of an initial value of the shift register in a state that the feedback tap is determined ([*0057-59*]). Flowchart in figure *3B* discloses the usage of shift register value and mask value to yield code ([*0056*]). **Lipponen** et al, therefore, *broadly* reads on the ***claim language*** of claim **5** in combination with **Lee** et al.

In view of the explanation above, the examiner respectfully maintains the rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xavier Wong whose telephone number is (571)270-1780. The examiner can normally be reached on Monday through Friday 8:30 am - 6:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Seema S. Rao/
Supervisory Patent Examiner, Art Unit 2616

Xavier Szewai Wong
X.S.W / x.s.w
17th March 2008